

II. AMENDMENTS TO CLAIMS/CLAIMS LISTING

The below listing of claims replaces all prior versions and listings of claims in the application:

1. (Currently Amended) In a process for treating negatively charged fly ash ~~particles~~ with unacceptably high levels of carbon which cannot be economically used as an additive for cement comprising turbulently subjecting in a gas stream ~~in a venturi~~ containing said negatively charged fly ash ~~particles~~ with unacceptably high levels of carbon to an ozone generator comprising an insulator having thereon a metal surface which has at least one metallic sharp-tipped component disposed thereon and wherein the ozone generator produces ozone through corona discharge causing pacification of the fly ash with unacceptably high levels of carbon so that the fly ash can be efficiently used as an additive for cement, the improvement wherein:

said metallic sharp-tipped component is placed in a gas stream within a venturi to produce added speed to produce an enhanced corona discharge.

2. (Original) The process of claim 1 wherein the fly ash with unacceptably high levels of carbon was manufactured by a triboelectric carbon separation process to remove carbon from the fly ash but the carbon level of the fly ash still remains excessively high.

3. (Original) The process of claim 1 wherein the ozone is produced by corona discharge in an exhaust tube.

4. (Currently Amended) A method for supplying ozone to fly ash with excessively high levels of carbon in the gas stream resulting from combustion of fuel comprising:

employing a venturi in the gas stream to produce a corona discharge resulting in ozone generation in said gas stream thereby producing an ozone treated fly ash product requiring less air entrainment agent to produce an acceptable product for addition to cement in the manufacture of concrete.

5. (Original) The process of claim 4 wherein the fly ash is produced by a triboelectric process.

6-17. (Canceled)

18. (New) A process for treating negatively charged fly ash with unacceptably high levels of carbon comprising:

turbulently subjecting a gas stream containing the negatively charged fly ash to an electrostatic device, the electrostatic device comprising:

an optional insulator;

a metallic surface optionally mounted on the insulator;

at least one metallic sharp-tipped component mounted on the metallic surface;

the electrostatic device being disposed within a venturi;

producing a corona discharge from the subjecting of the negatively charged fly ash to the electrostatic device;

producing ozone by the corona discharge; and

pacifying the fly ash with the ozone.

19. (New) The process for treating negatively charged fly ash of claim 18, wherein the metallic surface is cylindrical and the at least one metallic sharp-tipped component protrudes from the cylindrical surface.

20. (New) The process for treating negatively charged fly ash of claim 18, wherein the metallic sharp-tipped component is a spike coming to a sharp point or a wire coming to a sharp point.

21. (New) The process for treating negatively charged fly ash of claim 18, wherein the gas stream containing the negatively charged fly ash flows in a pipe;

wherein the electrostatic device is disposed in the pipe; and

wherein a baffle is disposed upstream of the electrostatic device, the baffle being adapted to prevent fly ash abrasion of the metallic parts of electrostatic device.

22. (New) The process for treating negatively charged fly ash of claim 21, wherein the electrostatic device is mounted in a non-metallic pipe, the pipe comprising the venturi.

23. (New) A process for treating negatively charged fly ash with unacceptably high levels of carbon comprising,

establishing a flow of the negatively charged fly ash within a venturi,

the venturi containing a metallic plate having a flat surface and at least one metallic spike engaged with the flat surface,

contacting the at least one metallic spike with the flow of the negatively charged fly ash;

producing a corona discharge from the spike; and

producing ozone from the corona discharge.

24. (New) The process for treating negatively charged fly ash of claim 23, wherein the metallic plate is insulated from the venturi.

25. (New) The process for treating negatively charged fly ash of claim 23, wherein the at least one metallic spike comprises a series of wires or spikes.

26. (New) A process for producing ozone for treating negatively charged fly ash comprising,

establishing a flow of negatively charged fly ash in a non-metallic pipe, wherein the pipe comprises a venturi;

contacting an electrostatic system with the flow of negatively charged fly ash, the electrostatic system comprising a metal surface and at least one metallic

spike engaged with the surface, the electrostatic system being mounted in the non-metallic pipe;

imparting a charge to the at least one metallic spike, the charge being sufficient to produce a corona discharge; and
producing ozone from the corona discharge.

27. (New) A process for producing ozone for treating negatively charged fly ash comprising,

establishing a flow of negatively charged fly ash in a channel, wherein the channel comprises a venturi;

impinging the flow of negatively charged fly ash upon an electrostatic system, the electrostatic system comprising a metal plate, the metal plate comprising either

a) a flat surface and at least one metallic spike engaged with the flat surface, or

b) a series of wires or spikes;

producing a corona discharge from the spike or wires; and
producing ozone from the corona discharge.

28. (New) The process for producing ozone of claim 27,
wherein the metal plate is separated from the channel by an insulated base.